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## The Introduced Dirt-Colored Seed Bug, *Megalonotus sabulicola* (Hemiptera: Rhyparochromidae): New for Arkansas

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Over the past decade, we have published several new records of Hemiptera from Arkansas in this journal (Chordas et al. 2005, 2011, Chordas and Kovarik 2008a, 2008b, Chordas and Kremers 2009). We now document the introduced dirt-colored seed bug, *Megalonotus sabulicola* (Thomson, 1870) for the first time from Arkansas.

On 20 April 2013, CTM and HWR collected various hemipterans at a watershed 8.0 km N of Huntsville off St. Hwy. 23W at Withrow Springs State Park (36.156195°N, 93.733369°W), Madison County (Fig. 1). Specimens were collected with a standard insect sweep net or an aquatic dip net and placed in individual vials of 70% ethanol. Bugs were forwarded to the senior author for identification, photography, and deposition of voucher specimens into the C.A. Triplehorn Insect Collection (The Ohio State University, Columbus, Ohio). Ashlock and Slater (1988), Maw et al. (2000), Scudder and Footitt (2006), and Wheeler (1992) were used as distribution references. Wheeler (1989, 1992) were used as taxonomic and identification references.

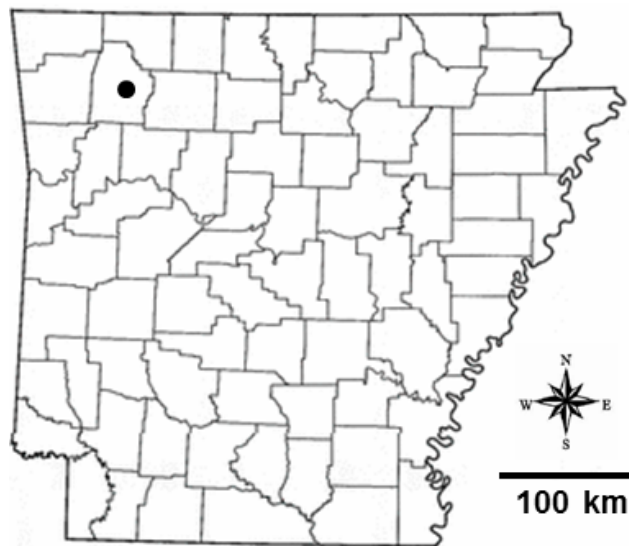


Figure 1. Location of study site (dot) in Madison County, Arkansas.

A single noteworthy specimen of *M. sabulicola* (Fig. 2) was collected in emergent vegetation. Our specimen matches the identifying characters and figure in Wheeler (1989). The bug possesses a mottled brown-testaceous hemelytra with a piceous head, pronotum and scutellum (Fig. 2A). It also has a prominent spine on the lateral, ventral aspect of the swollen profemur (Fig. 2B) and an antennal segment II almost all yellow with black at the distal edge (Fig. 2C). The tibiae are yellowish with both the meso- and metafemurs are yellow proximally and piceous distally (Figs. 2A-B).

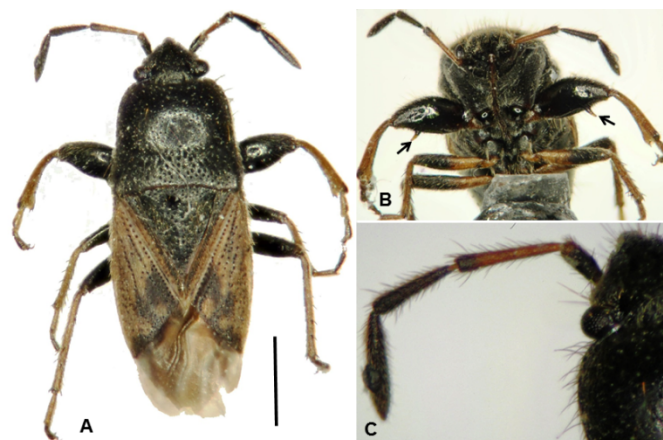


Figure 2. A. Dorsal habitus of *Megalonotus sabulicola*. Bar = 1 mm. B. Ventrolateral profemur spines (arrows). C. Antennae.

*Megalonotus sabulicola* was introduced from Europe in the early 1900's and has been reported to feed on seeds of knapweed, *Centaurea* spp. (Wheeler 1989). Documented mainly from both Atlantic and Pacific coastal regions of North America (see distribution herein), *M. sabulicola* was unexpected for Arkansas.

Tabulation of 21 records for *M. sabulicola* (Fig. 4) are as follows: USA (18 records): Arkansas [New Record], California, Connecticut, Delaware, Idaho, Massachusetts, Maryland, Michigan, New Jersey, New

York, North Dakota, Oregon, Pennsylvania, Rhode Island, Utah, Virginia, West Virginia, Washington. Canada (3 records): British Columbia, Ontario, Quebec.

Our Arkansas record represents a significant range extension of >1,000 km from the closest reported location (western Virginia) for this species. Previous records were primarily concentrated along the eastern and western portions of the U.S. and Canada with a few additional records in the Great Lakes region and a report from North Dakota (Fig. 3).

In summary, more data and collections are needed to determine the persistence of this bug in Arkansas. How and when it arrived in the state would be pure speculation at this point. For detailed biological information on *M. sabulicola*, see Wheeler (1989).



Figure 3. Distribution of *Megalonotus sabulicola* north of Mexico. Light shading (previous records); dark shading (new state record).

### Acknowledgments

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